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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,603	09/10/2003	Hwa-Sung Shin	1349.1258	1917

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STAAS & HALSEY LLP  
SUITE 700  
1201 NEW YORK AVENUE, N.W.  
WASHINGTON, DC 20005

EXAMINER
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MORRISON, THOMAS A

ART UNIT	PAPER NUMBER
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3653

DATE MAILED: 11/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/658,603

Applicant(s)

SHIN ET AL.

Examiner

Thomas A. Morrison

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 16-18, 24 and 26-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-18, 24 and 26-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 16-18, 24 and 26-31, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art FIG. 1 of the instant application in view of U.S. Patent No. 4,786,042 (Stemmler).

Regarding independent claim 16, applicant's admitted prior art FIG. 1 shows a paper feeding apparatus of an image forming apparatus having a frame (10), a knock-up plate (11) movably mounted on the frame (10), and a pickup roller (22) for picking up a sheet of paper arranged in a stack of sheets of paper disposed on the knock-up plate (11), including a paper setting unit (30),

wherein the paper setting unit (30) has

a knock-up plate raising/lowering portion (12) for raising and lowering the knock-up plate (11) with respect to the pickup roller (22),

a first finger device (14) disposed on the knock-up plate raising/lowering portion (12) to contact a first corner of a leading end of the paper (see also numbered paragraph [0006] of the Description of the Related Art section of the instant application),

a paper guide (25) slidably disposed on the knock-up plate (11) to guide the sheet of paper in accordance with a paper size. However, applicant's admitted prior art FIG. 1 does not specifically show a second finger device portion, as claimed.

Regarding independent claim 24, applicant's admitted prior art FIG. 1 shows a paper feeding apparatus of an image forming apparatus having a frame (10), a knock-up plate (11) movably mounted on the frame (10), and a pickup roller (22) picking up a sheet of paper disposed on the knock-up plate (11), the paper feeding apparatus having

a first finger device (14) movably disposed on a first portion of the knock-up plate (11) to contact a first end (i.e., leading end) of the paper. However, applicant's admitted prior art FIG. 1 does not specifically show a second finger device, as claimed.

With regard to independent claims 16 and 24, the Stemmler patent discloses that it is well known to provide a paper handling device with two corner snubbers (i.e., two finger devices 40 and 40) that are arranged such that a first one of the finger devices (40) is provided on one corner of a leading edge of a stack of sheets and the second finger device (40) is provided on a movable guide (28), so as to contact another corner of the leading edge of the stack of sheets. See, e.g., Figs. 1, 3 and 4 of the Stemmler patent. Stemmler explains that the corner snubbers (first and second finger devices) are arranged to ride on the corners of the stack of sheets to inhibit forward motion of the corners of the sheets when the sheet is fed in the forward position. See, e.g., column 6, line 62 to column 7, line 1. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the movable guide (25) of the apparatus

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shown in applicant's admitted prior art FIG. 1 with a second corner snubber (i.e., a second finger device) so that forward motion of both corners of the leading end of the sheets is inhibited when the sheets are fed in the forward position, as taught by the Stemmler patent. Providing the apparatus shown in applicant's admitted prior art FIG. 1 with a second corner snubber (second finger device), in a manner as taught by Stemmler, will result in the second finger device being movably disposed on the paper guide (25) of the apparatus shown in applicant's admitted prior art FIG. 1 to contact a second corner of the leading end of the topmost sheet of paper. Providing the second finger device on the guide (25) will also result in the second finger device being movably disposed on a second portion of the knock-up plate (11) of the apparatus shown in applicant's admitted prior art FIG. 1. In addition, providing the apparatus shown in applicant's admitted prior art FIG. 1 with a second corner snubber (second finger device), in a manner as taught by Stemmler, will result in the second finger device being movable independently from the first finger device (14). Thus, applicant's admitted prior art FIG. 1 in view of the Stemmler patent discloses all of the limitations of independent claims 16 and 24.

Regarding claim 17, providing the apparatus shown in applicant's admitted prior art FIG. 1 with a second corner snubber (second finger device), in a manner as taught by Stemmler, will result in the first finger device (14) being disposed opposite to the second finger device with respect to the sheet of paper.

Regarding claim 18, applicant's admitted prior art FIG. 1 shows that the frame (10) has a side on which the knock-up plate raising/lowering portion (12) is rotatably

disposed, and the paper guide (25) moves toward or away from the side according to the size of the sheet of paper.

Regarding claim 26, applicant's admitted prior art FIG. 1 shows that the knock-up plate (11) has first and second sides disposed opposite to each other with respect to a paper feeding direction.

Regarding claim 27, applicant's admitted prior art FIG. 1 shows a knock-up plate raising/lowering portion (12) moving with respect to the frame (10) to raise and lower the knock-up plate (11) with respect to the pickup roller (22).

Regarding claim 28, applicant's admitted prior art FIG. 1 shows that the first finger device (14) moves according to a movement of the knock-up plate raising/lowering portion (12).

Regarding claim 29, applicant's admitted prior art FIG. 1 shows a paper guide (25) slidably disposed on the knock-up plate (11) to move toward and away from the knock-up plate raising/lowering portion (12) according to a size of the paper disposed between the paper guide (25) and a side of the knock-up plate (11).

Regarding claim 30, applicant's admitted prior art FIG. 1 shows that the knock-up plate raising/lowering portion (12) moves in a first direction, and the paper guide (25) moves in a second direction perpendicular to the first direction.

Regarding claim 31, applicant's admitted prior art FIG. 1 shows that the first finger device (14) moves in the first direction. Providing the second finger device on the

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guide (25) of the apparatus shown in applicant's admitted prior art FIG. 1, in a manner as taught by the Stemmler patent, will result in the second finger device pivoting up and down in the first direction, and also moving together with the guide (i.e., guide 25 in applicant's admitted prior art FIG. 1) in the second direction.

### ***Response to Arguments***

2. Applicant's arguments filed 09/12/2006 have been fully considered but they are not persuasive. Applicant argues that

Independent claims 16 and 24 recite: "...wherein the first and second finger devices move independently from each other." In contrast to claims 16 and 24, neither the applicant's admitted prior art nor Stemmler discuss first and second finger devices moving independently of each other. As stated in the Office Action, the applicant's admitted prior art does not discuss a second finger device. Stemmler discusses a fixed side edge sheet guide 31 and movable side edge sheet guide 28. Each guide 28, 31 has arms 36 pivotally mounted to the rear thereof about pivot points 37, 38 with corner snubbers 40 on the other end of the arms corresponding to the first and second finger devices recited in claims 16 and 24. However, Stemmler does not cure the deficiency in the applicant's admitted prior art of not discussing that the finger devices move independently from each other. By contrast, in Stemmler, a stack of sheets to be placed in the cassette against the fixed side edge sheet guide 31 with the leading edge of the sheets under the snubbers 40. The movable side edge sheet guide 28 and rear edge sheet guide 29, the slidable width and length bottom plates 50 and 49, cam slots 51 and 52, and the locating pins 53 and 54 move in conjunction with each other according to the positions of the arm ends 45 and 44 as shown in figure 1 of Stemmler. As such, it is respectfully submitted that as neither the applicant's prior art nor the snubbers 40 of Stemmler show the technical feature of claims 16 and 24 where first and second finger devices move independently of each other and claims 16 and 24 are not obvious over the cited prior art.

In response, Stemmler discloses that it is well known to provide a paper handling device with two corner snubbers (i.e., two finger devices 40 and 40) that are arranged such that a first one of the finger devices (40) is provided on one corner of a leading

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edge of a stack of sheets and the second finger device (40) is provided on a movable guide (28), so as to contact another corner of the leading edge of the stack of sheets. See, e.g., Figs. 1, 3 and 4 of the Stemmler patent. Stemmler explains that the corner snubbers (first and second finger devices) are arranged to ride on the corners of the stack of sheets to inhibit forward motion of the corners of the sheets when the sheet is fed in the forward position. See, e.g., column 6, line 62 to column 7, line 1. As such, Stemmler provides motivation for providing the movable guide (25) of the apparatus shown in applicant's admitted prior art FIG. 1 with a second corner snubber (i.e., a second finger device) so that forward motion of both corners of the leading end of the sheets is inhibited when the sheets are fed in the forward position. Providing the apparatus shown in applicant's admitted prior art FIG. 1 with a second corner snubber (second finger device), in a manner as taught by Stemmler, will result in the second finger device being movable independently from the first finger device (14). In particular, the movable guide (25) of applicant's admitted prior art Fig. 1 which would include the second finger device according to the teachings of Stemmler, could be moved from side to side without moving the first finger device (14) on the apparatus of applicant's admitted prior art Fig. 1. Thus, the apparatus of applicant's admitted prior art Fig. 1 in view of Stemmler will result in first and second finger devices that move independently from each other.

### ***Conclusion***

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).



A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas A. Morrison whose telephone number is (571) 272-7221. The examiner can normally be reached on M-F, 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Mackey can be reached on (571) 272-6916. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a


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USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

11/25/2006



PATRICK MACKEY  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600